IMG UI Map

Data Exploration

Find Genomes: Find genomes/metagenomes of interest.

- **Genome Browser**: Browse all public genomes and your own private genomes (private genomes are in MER only) in table display or tree display.
- **Genome Search**: Search genomes of interest in the IMG database. Search can be based on keywords or on metadata categories. Metadata is from GOLD.
- Scaffold Search: Search scaffolds/contigs based on scaffold IDs, names, or statistics.
- **Deleted Genomes**: View older genomes/metagenomes that have been deleted from IMG.

Find Genes: Find genes of interest.

- **Gene Search**: Search genes of interest based on IDs, names, locus tags, etc.
- Cassette Search: Search gene cassette.
- BLAST: Search genes using BLAST. (This option is only available in MER only).
- Phylogenetic Profilers: There are 2 options.
 - Single Genes: Search genes in a selected genome with and/or without homologs in other genomes.
 - Gene Cassettes: Find genes in a query genome, that are collocated in the query genome
 as well as across other genomes of interest, based on their inclusion in cassettes.
 Limitation: Currently you can only select up to 50 Collocated In Genomes.

Find Fuctions: Find functions of interest.

- **Function Search**: Find functions in selected genomes based on keyword.
- Search Pathways: Search IMG, KEGG, MetaCyc and/or MPW pathways based on enzyme EC or keyword.
- **Secondary Metabolism**: Re-direct to IMG/ABC for biosynthetic gene cluster and secondary metabolite search.
- **COG**: Find COG functions.
 - COG Browser: Browse all COG functions in IMG.
 - **COG List**: Browse all COG functions in a table display.
 - COG List w/ Stats: Browse COG function list with associated isolate genome and metagenome counts in IMG.
 - o **COG Id to Categories**: Browse COG functions and associated COG categories.
- **KOG**: Find KOG functions.
 - o **KOG Browser**: Browse all KOG functions in IMG.

- o **KOG List**: Browse all KOG functions in a table display.
- KOG List w/ Stats: Browse KOG function list with associated isolate genome and metagenome counts in IMG.
- **Pfam**: Find Pfam functions.
 - Pfam Browser: Browse all Pfam functions in IMG.
 - **Pfam List**: Browse all Pfam functions in a table display.
 - Pfam List w/ Stats: Browse Pfam function list with associated isolate genome and metagenome counts in IMG.
 - o **Pfam Clans**: Browse Pfam functions organized into corresponding clans.
- TIGRfam: Find TIGRfam functions.
 - TIGRfam Roles: Browse all TIGRfam functions in IMG.
 - TIGRfam List: Browse all TIGRfam functions in a table display.
 - TIGRfam List w/ Stats: Browse TIGRfam function list with associated isolate genome and metagenome counts in IMG.
- KEGG: Find KO terms, KEGG pathways or modules.
 - o **KO List**: Browse all KO terms in a table display.
 - KO List w/ Stats: Browse KO term list with associated isolate genome and metagenome counts in IMG.
 - o **KEGG Module List**: Browse all KEGG modules in a table display.
 - KEGG Module List w/ Stats: Browse KEGG module list with associated isolate genome and metagenome counts in IMG.
 - Orthology KO terms: Browse KEGG Orthology (KO) terms and Pathways.
 - Pathways via KO terms: Browse KEGG pathways via KO terms.
- **IMG Networks**: Find IMG terms, pathways or parts list.
 - o **IMG Network Browser**: Browse IMG networks and associated pathways.
 - o IMG Parts List: Browse IMG parts list.
 - o **IMG Pathways**: Browse IMG pathways in a table display.
 - o **IMG Terms**: Browse IMG terms.
- **Enzyme**: Browse all enzymes with corresponding isolate genome and metagenome counts in a table display.
- **MetaCyc**: Browse Metacyc pathways in tree display.
- **Phenotypes**: Browse IMG predicted phenotypes in a table display. All genomes predicted with a selected phenotype can be viewed in a table or tree display.
- **InterPro Browser**: Browse all InterPro proteins with corresponding isolate genome and gene counts in a table display.
- **Protein Family Comparison**: Check protein family comparisons.

Comparative Analysis

OMICS: Browse and analyze "omics" data in IMG.

- **Protein**: Browse protein expression study data.
- RNASeq: Browse RNASeq expression study data, including both transcriptome and metatranscriptome.
- Methylation: Browse Mythylomics experiement data.

Workspace: IMG users can save their genomes, genes, scaffolds or functions into workspace datasets for further analysis. Users who belong to one or more IMG groups can also view datasets shared by other group members. (This feature is available in MER only.)

- **Genome Sets**: View and analyze user's private and shared genome datasets.
- **Scaffold Sets**: View and analyze user's private and shared scaffold datasets.
- Function Sets: View and analyze user's private and shared function datasets.
- Gene Sets: View and analyze user's private and shared gene datasets.
- View Public Sets: View "public" datasets (if any) available to all IMG users.
- Export Workspace: Export workspace datasets to files.

MyIMG: MyIMG specific features.

- MyIMG Home: MyIMG Home page, which includes IMG Group information (in MER only).
- Annotations: MyIMG gene annotations. (This is available in MER only.)
- MyJob: View user's computation on demand jobs. (This is available in MER only.)
- **Preferences**: Set web browser preferences.
- **Logout**: Log out of IMG.

Additional Resources

Data Marts: There's the list of all IMG companion systems.

- **IMG/M**: Public IMG system that does not require login. It shows public genomes and metagenomes only.
- IMG/M ER: IMG/M plus private genomes and metagenomes. The system requires login.
- IMG ABC: IMG system for discovery of biosynthetic gene clusters and novel secondary metabolites.
- **IMG VR**: IMG Virus system.
- **IMG Proportal BETA**: IMG ProPortal BETA site.
- **IMG HMP**: IMG HMP system.
- Submit Data Set: IMG Submission system.

Help: Help and documentation.

- **About IMG**: Show IMG mission, FAQs, related links and document archive.
- User Guide: Show system requirement and various user guides.

- **Downloads**: Show data usage policy, how to download, and link to JGI Genome Portal for actual downloading.
- **Citation**: Show how to cite IMG in publications.
- **Genome Annotation SOP**: IMG isolate genome annotation standard operating procedure.
- Metagenome SOP: IMG metagenome annotation standard operating procedure.
- **Education**: Education material.
- MGM Workshop: Information for MGM workshops.
- **IMG User Forum**: IMG user forum.





